L-PATTERN

THE FIGURES BELOW ARE MADE OF SQUARES. THE NUMBER OF SQUARES INCREASES WITH EACH NEW FIGURE.

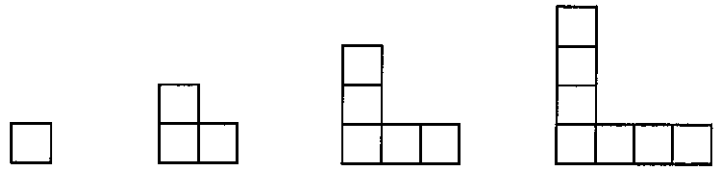


Figure 1 Figure 2 Figure 3 Figure 4

IMAGINE THAT THE PATTERN CONTINUES TO INCREASE IN THE SAME WAY.

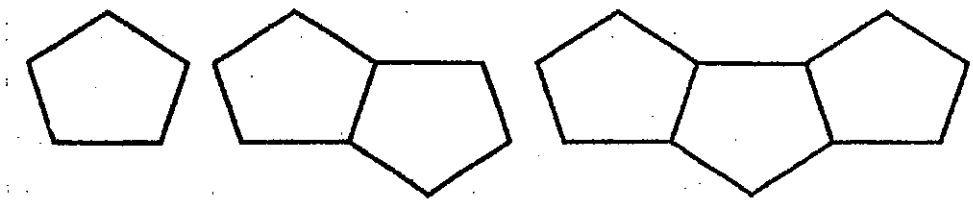
a. HOW MANY SQUARES ARE IN THE 5TH FIGURE?

b. HOW MANY SQUARES ARE IN THE 100TH FIGURE?

c. HOW COULD YOU FIND THE NUMBER OF SQUARES IN ANY FIGURE IN THIS SEQUENCE? EXPLAIN HOW YOU KNOW. HOW DOES YOUR METHOD RELATE TO THE VISUAL REPRESENTATION SHOWN ABOVE?

d. WRITE A RULE OR EQUATION THAT WOULD FIND OUT THE NUMBER OF SQUARES IN ANY FIGURE IN THIS SEQUENCE.

PENTAGON TRAIN PERIMETER PATTERN



TRAIN 1 TRAIN 2 TRAIN 3

a. DETERMINE THE PERIMETER FOR THE 4TH TRAIN.

B. DETERMINE THE PERIMETER FOR THE 100TH TRAIN.

C. WRITE A RULE THAT COULD BE USED TO FIND THE PERIMETER OF ANY TRAIN IN THE PATTERN. EXPLAIN HOW YOU KNOW.

D. HOW DOES YOUR DESCRIPTION RELATE TO THE VISUAL REPRESENTATION OF THE TRAINS?